

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Takashi Tsuji et al.                      Art Unit :  
Serial No. :    Examiner :  
Filed : Herewith  
Title : HUMAN MONOCLONAL ANTIBODY AGAINST A COSTIMULATORY  
SIGNAL TRANSDUCTION MOLECULE AILIM AND PHARMACEUTICAL  
USE THEREOF

**MAIL STOP PATENT APPLICATION**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Under 35 U.S.C. § 120, this application relies on the earlier filing date of U.S. Application Number 09/859,053, filed on May 16, 2001. The references listed on the enclosed form PTO-1449 were submitted to and/or cited by the Office in the prior application and, therefore, are not provided in this application.

Applicants also wish to bring to the Examiner's attention the following co-pending applications, which are assigned to the assignee of the present application and contain at least one overlapping inventor with the present application:

U.S. Application No. 09/383,551, filed August 26, 1999;  
U.S. Application No. 09/561,308, filed April 28, 2000;  
U.S. Application No. 10/107,828, filed March 26, 2002;  
U.S. Application No. 10/107,868, filed March 26, 2002;  
U.S. Application No. 10/107,907, filed March 26, 2002;  
U.S. Application No. 10/301,056, filed November 21, 2002;  
U.S. Application No. 10/729,880, filed December 5, 2003;  
U.S. Application No. 09/859,053, filed May 16, 2001;  
U.S. Application No. 10/625,105, filed July 22, 2003;  
U.S. Application No. 10/704,426, filed November 7, 2003;  
U.S. Application No. 10/704,030, filed November 7, 2003;

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Express Mail Label No. ET931345575US

March 10, 2004  
Date of Deposit

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Page : 2 of 2

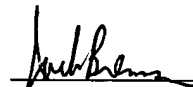
Attorney's Docket No.: 14539-006003 / JF-93US-D2

U.S. Application No. 10/704,072, filed November 7, 2003;  
U.S. Application No. 10/704,056, filed November 7, 2003;  
U.S. Application No. 10/723,602, filed November 25, 2003; and  
U.S. Application No. 10/721,404, filed November 25, 2003.

This statement is being filed with the application. Please apply any charges or credits to  
Deposit Account No. 06-1050, referencing Attorney Docket No. 14539-006003.

Respectfully submitted,

Date: March 10, 2004

  
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| Substitute Form PTO-1449<br>(Modified)   | U.S. Department of Commerce<br>Patent and Trademark Office | Attorney's Docket No.<br><b>14539-006003</b> | Application No. |
| <b>Information Disclosure Statement<br/>by Applicant</b><br>(Use several sheets if necessary)<br>(37 CFR §1.98(b)) |  | Applicant<br><b>Takashi Tsuji et al.</b>     |                 |
|  |  | Filing Date<br><b>Herewith</b>               | Group Art Unit  |

| U.S. Patent Documents |           |                 |                  |                     |       |          |                            |
|-----------------------|-----------|-----------------|------------------|---------------------|-------|----------|----------------------------|
| Examiner Initial      | Desig. ID | Document Number | Publication Date | Patentee            | Class | Subclass | Filing Date If Appropriate |
|                       | AA        | 5,506,126       | 4/9/1996         | Seed et al.         |       |          |                            |
|                       | AB        | 5,521,288       | 5/28/1996        | Linsley et al.      |       |          |                            |
|                       | AC        | 5,914,112       | 06/22/1999       | Bednar et al.       |       |          |                            |
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|                       | AE        | 2002/0156242    | 10/24/2002       | Tamatani et al.     |       |          |                            |

| Foreign Patent Documents or Published Foreign Patent Applications |           |                 |                  |                          |       |          |             |    |
|---|-----------|-----------------|------------------|--------------------------|-------|----------|-------------|----|
| Examiner Initial  | Desig. ID | Document Number | Publication Date | Country or Patent Office | Class | Subclass | Translation |    |
|   |           |                 |                  |                          |       |          | Yes         | No |
|   | AF        | WO 97/26912     | 07/31/1997       | WIPO                     |       |          |             |    |
|   | AG        | WO 98/11909     | 03/26/1998       | WIPO                     |       |          |             |    |
|   | AH        | WO 98/37415     | 08/27/1998       | WIPO                     |       |          |             |    |
|   | AI        | WO 98/38216     | 09/03/1998       | WIPO                     |       |          |             |    |
|   | AJ        | WO 98/45331     | 10/15/1998       | WIPO                     |       |          |             |    |
|   | AK        | WO 99/15553     | 04/01/1999       | WIPO                     |       |          |             |    |
|   | AL        | WO 00/19988     | 04/13/2000       | WIPO                     |       |          |             |    |
|   | AM        | WO 00/46240     | 08/10/2000       | WIPO                     |       |          |             |    |
|   | AN        | WO 00/67788     | 11/16/2000       | WIPO                     |       |          |             |    |
|   | AO        | WO 01/08700     | 02/08/2001       | WIPO                     |       |          |             |    |
|   | AP        | WO 01/12658     | 02/22/2001       | WIPO                     |       |          |             |    |
|   | AQ        | WO 01/15732     | 03/08/2001       | WIPO                     |       |          |             |    |
|   | AR        | WO 01/18022     | 03/15/2001       | WIPO                     |       |          |             |    |
|   | AS        | WO 01/21796     | 03/29/2001       | WIPO                     |       |          |             |    |
|   | AT        | WO 01/32675     | 05/10/2001       | WIPO                     |       |          |             |    |
|   | AU        | WO 01/64704     | 09/07/2001       | WIPO                     |       |          |             |    |
|   | AV        | WO 01/87981     | 11/22/2001       | WIPO                     |       |          |             |    |
|   | AW        | WO 02/44364     | 06/06/2002       | WIPO                     |       |          |             |    |
|   | AX        | WO 02/70010     | 09/12/2002       | WIPO                     |       |          |             |    |

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### Foreign Patent Documents or Published Foreign Patent Applications

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|------------------|-----------|--------------------|------------------|--------------------------|-------|----------|-------------|----|
|                  |           |                    |                  |                          |       |          | Yes         | No |
|                  | AY        | WO 02/76504        | 10/03/2002       | WIPO                     |       |          |             |    |
|                  | AZ        | AU 13320/99        | 04/12/1999       | AU                       |       |          |             |    |
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|                  | APP       | Dong, "ICOS co-stimulatory receptor is essential for T-cell activation and function," NATURE 409(6816):97-101 (2001)  |
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| Other Documents (include Author, Title, Date, and Place of Publication) |           |  |
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|   | ASS       | Guo et al., "Stimulatory Effects of B7-Related Protein-1 on Cellular and Humoral Immune Responses in Mice," J. IMMUNOL., 166(9):5578-5584 (2001)   |
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|   | AUU       | Heyeck et al., "Developmental regulation of a murine T-cell-specific tyrosine kinase gene, Tsk," PROC. NATL. ACAD. SCI. USA, 90:669-673 (1993)   |
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|   | AXX       | Ishikawa et al., "Prediction of the Coding Sequences of Unidentified Human Genes. X. The Complete Sequences of 100 New cDNA Clones from Brain Which Can Code for Large Proteins <i>in vitro</i> ," DNA RESEARCH, 5:169-176 (1998)              |
|   | AYY       | Kappel et al. "Regulating gene expression in transgenic animals" CURRENT OPINION IN BIOTECHNOLOGY 3:548-53 (1992)  |
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|  | Applicant<br><b>Takashi Tsuji et al.</b>                   |  |                 |
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| Other Documents (include Author, Title, Date, and Place of Publication) |           |  |
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| Examiner Initial  | Desig. ID | Document   |
|   | AKKK      | Mullins et al. "Transgenesis in nonmurine species" Hypertension 22:630-33 (1993)   |
|   | ALLL      | Niemann "Transgenic farm animals get off the ground" TRANSGENIC RESEARCH, 7:73-75 (1998)   |
|   | AMMM      | Nojima et al., "The 4F9 antigen is a member of the tetra spans transmembrane protein family and functions as an accessory molecule in T cell activation and adhesion," CELLULAR IMMUNOLOGY, 152:249-260 (1993)   |
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|   | APPP      | Pech et al., "A large section of the gene locus encoding human immunoglobulin variable regions of the kappa type is duplicated," J. Mol Biol. 183(3):291-9 (1985)  |
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|   | AVVV      | Sharpe, "Analysis of lymphocyte costimulation <i>in vivo</i> using transgenic and 'knockout' mice," CURRENT OPINION IN IMMUNOLOGY, 7:389-395 (1995)  |
|   | AWWW      | Sigmund "Are studies in genetically altered mice out of control?" ARTERIOSCLER. THROMB. VASC. BIOL., 20:1425-29 (2000)   |
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|   | AZZZ      | Tai et al., "A role for CD9 molecules in T cell activation," J. EXP. MED., 184:753-758 (1996)  |
|   | AAAAA     | Tamatani et al., "AILIM/ICOS: a novel lymphocyte adhesion molecule," INTERNATIONAL IMMUNOLOGY, 12(1):51-55 (2000)  |
|   | ABBBB     | Tamatani et al., "Characteristics of an antibody which induces an ICAM-1-LFA-1-independent adhesion pathway," PROCEEDINGS OF THE JAPANESE SOCIETY FOR IMMUNOLOGY, Vol. 23, Abstract No. H-160 (1993) [ORIGINAL JAPANESE AND ENGLISH LANGUAGE TRANSLATION]                        |
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|   | ADDDD     | Tezuka et al., "Identification and Characterization of Rat AILIM/ICOS, a Novel T-Cell Costimulatory Molecule, Related to the CD28/CTLA4 Family," BIOCHEM. BIOPHYS. RES. COMMUN., 276(1):335-345 (2000) |
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|   | AGGGG     | Wang et al., "Costimulation of T cells by B7-H2, a B7-like molecule that binds ICOS," BLOOD, 96(8):2808-2813 (2000)  |
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|   | AIIII     | Yoshinaga et al., "T-cell co-stimulation through B7RP-1 and ICOS," NATURE, 402(6763):827-832 (1999)  |

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